

Commission data, 375 carriers reported that they were engaged in the provision of paging and messaging services.⁷⁹ Of those, we estimate that 370 are small, under the SBA-approved small business size standard.⁸⁰

30. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the wireless communications services (WCS) auction.⁸¹ A "small business" is an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" is an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these small business size standards.⁸² The Commission auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity.

31. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted earlier, the SBA has developed a small business size standard for "Cellular and Other Wireless Telecommunications" services.⁸³ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁸⁴ According to Commission data, 445 carriers reported that they were engaged in the provision of wireless telephony.⁸⁵ We have estimated that 245 of these are small under the SBA small business size standard.

32. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁸⁶ For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁸⁷ These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.⁸⁸ No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won

⁷⁹ "Trends in Telephone Service" at Table 5.3.

⁸⁰ *Id.*

⁸¹ Public Notice, "Auction of Wireless Communications Services, Auction Notes and Filing Requirements for 128 WCS Licenses Scheduled for April 15, 1997," DA 97-386, Feb. 21, 1997.

⁸² SBA Dec. 2, 1998 Letter.

⁸³ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁸⁴ *Id.*

⁸⁵ "Trends in Telephone Service" at Table 5.3.

⁸⁶ See *Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824, 61 FR 33859 (July 1, 1996) (*PCS Order*); see also 47 C.F.R. § 24.720(b).

⁸⁷ See *PCS Order*, 11 FCC Rcd 7824.

⁸⁸ See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332, 59 FR 37566 (July 22, 1994).

approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁸⁹ On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

33. *Narrowband Personal Communications Services.* To date, two auctions of narrowband personal communications services (PCS) licenses have been conducted. For purposes of the two auctions that have already been held, “small businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁹⁰ A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.⁹¹ In the future, the Commission will auction 459 licenses to serve Metropolitan Trading Areas (MTAs) and 408 response channel licenses. There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future auctions. However, four of the 16 winning bidders in the two previous narrowband PCS auctions were small businesses, as that term was defined. The Commission assumes, for purposes of this analysis that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses will acquire narrowband PCS licenses by means of the Commission’s partitioning and disaggregation rules.

34. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.⁹² For the census category Cellular and Other Wireless Telecommunications, Census Bureau data for 1997 show that there were 977

⁸⁹ FCC News, Broadband PCS, D, E and F Block Auction Closes, No. 71744 (rel. Jan. 14, 1997); see also *Amendment of the Commission’s Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436, 62 FR 55348 (Oct. 24, 1997).

⁹⁰ *Amendment of the Commission’s Rules to Establish New Personal Communications Services, Narrowband PCS*, Docket No. ET 92-100, Docket No. PP 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456, 65 FR 35875 (June 6, 2000).

⁹¹ See SBA Dec. 2, 1998 Letter.

⁹² 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

firms in this category, total, that operated for the entire year.⁹³ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.⁹⁴ Thus, under this second category and size standard, the majority of firms can, again, be considered small. Assuming this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard. In addition, limited preliminary census data for 2002 indicate that the total number of cellular and other wireless telecommunications carriers increased approximately 321 percent from 1997 to 2002.⁹⁵

35. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the 220 MHz Third Report and Order, we adopted a small business size standard for “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁹⁶ This small business size standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁹⁷ A “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years. The SBA has approved these small business size standards.⁹⁸ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.⁹⁹ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.¹⁰⁰ Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.¹⁰¹

36. *800 MHz and 900 MHz Specialized Mobile Radio Licenses.* The Commission awards “small entity” and “very small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than

⁹³ U.S. Census Bureau, 1997 Economic Census, Subject Series: “Information,” Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513322 (issued October 2000).

⁹⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is “Firms with 1000 employees or more.”

⁹⁵ See U.S. Census Bureau, 2002 Economic Census, Industry Series: “Information,” Table 2, Comparative Statistics for the United States (1997 NAICS Basis): 2002 and 1997, NAICS code 513322 (issued Nov. 2004). The preliminary data indicate that the total number of “establishments” increased from 2,959 to 9,511. In this context, the number of establishments is a less helpful indicator of small business prevalence than is the number of “firms,” because the latter number takes into account the concept of common ownership or control. The more helpful 2002 census data on firms, including employment and receipts numbers, will be issued in late 2005.

⁹⁶ *220 MHz Third Report and Order*, 12 FCC Rcd 10943, 11068-70, paras. 291-295 (1997).

⁹⁷ *Id.* at 11068, para. 291.

⁹⁸ See Letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, Small Business Administration (Jan. 6, 1998).

⁹⁹ See generally Public Notice, “220 MHz Service Auction Closes,” 14 FCC Rcd 605 (1998).

¹⁰⁰ See, e.g., Public Notice, “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” 14 FCC Rcd 1085 (1999).

¹⁰¹ Public Notice, “Phase II 220 MHz Service Spectrum Auction Closes,” 14 FCC Rcd 11218 (1999).

\$15 million in each of the three previous calendar years, or that had revenues of no more than \$3 million in each of the previous calendar years, respectively.¹⁰² These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities.

37. *700 MHz Guard Band Licensees.* In the *700 MHz Guard Band Order*, we adopted a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁰³ A "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.¹⁰⁴ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.¹⁰⁵

38. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.¹⁰⁶ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).¹⁰⁷ The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no more than 1,500 persons.¹⁰⁸ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

¹⁰² 47 C.F.R. § 90.814(b)(1).

¹⁰³ See *Service Rules for the 746-764 MHz Bands, and Revisions to part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 65 FR 17599 (Apr. 4, 2000).

¹⁰⁴ See generally Public Notice, "220 MHz Service Auction Closes," Report No. WT 98-36 (Oct. 23, 1998).

¹⁰⁵ Public Notice, "700 MHz Guard Band Auction Closes," DA 01-478 (rel. Feb. 22, 2001).

¹⁰⁶ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

¹⁰⁷ BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

¹⁰⁸ 13 C.F.R. § 121.201, NAICS code 517212.

39. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.¹⁰⁹ We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.¹¹⁰ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

40. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.¹¹¹ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.¹¹² There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

41. *Fixed Microwave Services.* Fixed microwave services include common carrier,¹¹³ private operational-fixed,¹¹⁴ and broadcast auxiliary radio services.¹¹⁵ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary

¹⁰⁹ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

¹¹⁰ 13 C.F.R. § 121.201, NAICS codes 517212.

¹¹¹ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

¹¹² *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

¹¹³ See 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission's Rules) for common carrier fixed microwave services (except Multipoint Distribution Service).

¹¹⁴ Persons eligible under parts 80 and 90 of the Commission's Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

¹¹⁵ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's rules. See 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.¹¹⁶ The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are up to 22,015 common carrier fixed licensees and up to 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We noted, however, that the common carrier microwave fixed licensee category includes some large entities.

42. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.¹¹⁷ There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.¹¹⁸ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.¹¹⁹

43. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.¹²⁰ An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹²¹ The SBA has approved these small business size standards.¹²² The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and policies adopted herein.

44. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service comprises Multichannel Multipoint Distribution Service (MMDS) systems and Multipoint Distribution Service (MDS).¹²³ MMDS systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of MDS and Educational Broadband Service (formerly

¹¹⁶ 13 C.F.R. § 121.201, NAICS code 517212.

¹¹⁷ This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

¹¹⁸ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

¹¹⁹ *Id.*

¹²⁰ See *Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, Report and Order, 63 Fed. Reg. 6079 (Feb. 6, 1998).

¹²¹ *Id.*

¹²² See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

¹²³ *Amendment of Parts 1, 21.73, 74, and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, WT Docket No. 03-66, RM-10586, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Red 14165 (2004).

known as Instructional Television Fixed Service).¹²⁴ In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.¹²⁵ The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies generating \$12.5 million or less in annual receipts.¹²⁶ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.¹²⁷ Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, we estimate that the majority of providers in the Broadband Radio Service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard also appears applicable to Educational Broadband Service. There are presently 2,032 Educational Broadband Service licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.¹²⁸ Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

45. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹²⁹ The auction of the 1,030 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹³⁰ An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹³¹ The SBA has approved these small business size standards in the context of LMDS auctions.¹³² There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

¹²⁴ See *id.*

¹²⁵ 47 C.F.R. § 21.961(b)(1).

¹²⁶ 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in October 2002).

¹²⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)", Table 4, NAICS code 513220 (issued October 2000).

¹²⁸ In addition, the term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

¹²⁹ See *Local Multipoint Distribution Service*, Second Report and Order, 12 FCC Rcd 12545 (1997).

¹³⁰ *Id.*

¹³¹ See *id.*

¹³² See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

46. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.¹³³ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.¹³⁴ A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.¹³⁵ We cannot estimate, however, the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum.

47. *24 GHz – Incumbent Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.¹³⁶ According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.¹³⁷ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.¹³⁸ Thus, under this size standard, the great majority of firms can be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent¹³⁹ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

48. *24 GHz – Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for "small business" is an entity that, together with controlling interests and

¹³³ *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 59 Fed. Reg. 24947 (May 13, 1994).

¹³⁴ *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed. Reg. 59656 (Nov. 3, 1999).

¹³⁵ *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed. Reg. 59656 (Nov. 3, 1999).

¹³⁶ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

¹³⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5, NAICS code 513322 (issued Oct. 2000).

¹³⁸ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

¹³⁹ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.¹⁴⁰ "Very small business" in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.¹⁴¹ The SBA has approved these small business size standards.¹⁴² These size standards will apply to the future auction, if held.

2. Cable and OVS Operators

49. *Cable and Other Program Distribution.* This category includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems, and subscription television services. The SBA has developed small business size standard for this census category, which includes all such companies generating \$12.5 million or less in revenue annually.¹⁴³ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.¹⁴⁴ Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, the Commission estimates that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein.

50. *Cable System Operators (Rate Regulation Standard).* The Commission has developed its own small business size standard for cable system operators, for purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.¹⁴⁵ The most recent estimates indicate that there were 1,439 cable operators who qualified as small cable system operators at the end of 1995.¹⁴⁶ Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, the Commission estimates that there are now fewer than 1,439 small entity cable system operators that may be affected by the rules and policies adopted herein.

51. *Cable System Operators (Telecom Act Standard).* The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the

¹⁴⁰ *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(2).

¹⁴¹ *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(1).

¹⁴² See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

¹⁴³ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 513220 (changed to 517510 in October 2002).

¹⁴⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 513220 (issued October 2000).

¹⁴⁵ 47 C.F.R. § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of \$100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393 (1995), 60 FR 10534 (Feb. 27, 1995).

¹⁴⁶ Paul Kagan Associates, Inc., *Cable TV Investor*, February 29, 1996 (based on figures for December 30, 1995).

United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000.”¹⁴⁷ The Commission has determined that there are 67,700,000 subscribers in the United States.¹⁴⁸ Therefore, an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹⁴⁹ Based on available data, the Commission estimates that the number of cable operators serving 677,000 subscribers or fewer, totals 1,450.¹⁵⁰ The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million,¹⁵¹ and therefore are unable, at this time, to estimate more accurately the number of cable system operators that would qualify as small cable operators under the size standard contained in the Communications Act of 1934.

52. *Open Video Services.* Open Video Service (OVS) systems provide subscription services.¹⁵² The SBA has created a small business size standard for Cable and Other Program Distribution.¹⁵³ This standard provides that a small entity is one with \$12.5 million or less in annual receipts. The Commission has certified approximately 25 OVS operators to serve 75 areas, and some of these are currently providing service.¹⁵⁴ Affiliates of Residential Communications Network, Inc. (RCN) received approval to operate OVS systems in New York City, Boston, Washington, D.C., and other areas. RCN has sufficient revenues to assure that they do not qualify as a small business entity. Little financial information is available for the other entities that are authorized to provide OVS and are not yet operational. Given that some entities authorized to provide OVS service have not yet begun to generate revenues, the Commission concludes that up to 24 OVS operators (those remaining) might qualify as small businesses that may be affected by the rules and policies adopted herein.

3. Internet Service Providers

53. *Internet Service Providers.* The SBA has developed a small business size standard for Internet Service Providers (ISPs). ISPs “provide clients access to the Internet and generally provide related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity.”¹⁵⁵ Under the SBA size standard, such a business is small if it has average annual receipts

¹⁴⁷ 47 U.S.C. § 543(m)(2).

¹⁴⁸ See *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice DA 01-158 (Jan. 24, 2001).

¹⁴⁹ 47 C.F.R. § 76.901(f).

¹⁵⁰ See *FCC Announces New Subscriber Count for the Definition of Small Cable Operators*, Public Notice, DA 01-0158 (rel. Jan. 24, 2001).

¹⁵¹ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission’s rules. See 47 C.F.R. § 76.909(b).

¹⁵² See 47 U.S.C. § 573.

¹⁵³ 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in October 2002).

¹⁵⁴ See <<http://www.fcc.gov/csb/ovs/csovsr.html>> (current as of March 2002).

¹⁵⁵ U.S. Census Bureau, “2002 NAICS Definitions: 518111 Internet Service Providers” (Feb. 2004) <www.census.gov>.

of \$21 million or less.¹⁵⁶ According to Census Bureau data for 1997, there were 2,751 firms in this category that operated for the entire year.¹⁵⁷ Of these, 2,659 firms had annual receipts of under \$10 million, and an additional 67 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action. In addition, limited preliminary census data for 2002 indicate that the total number of Internet service providers increased approximately five percent from 1997 to 2002.¹⁵⁸

4. Other Internet-Related Entities

54. *Web Search Portals.* Our action pertains to VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the census bureau has identified firms that “operate web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format. Web search portals often provide additional Internet services, such as e-mail, connections to other web sites, auctions, news, and other limited content, and serve as a home base for Internet users.”¹⁵⁹ The SBA has developed a small business size standard for this category; that size standard is \$6 million or less in average annual receipts.¹⁶⁰ According to Census Bureau data for 1997, there were 195 firms in this category that operated for the entire year.¹⁶¹ Of these, 172 had annual receipts of under \$5 million, and an additional nine firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

55. *Data Processing, Hosting, and Related Services.* Entities in this category “primarily . . . provid[e] infrastructure for hosting or data processing services.”¹⁶² The SBA has developed a small business size standard for this category; that size standard is \$21 million or less in average annual receipts.¹⁶³ According to Census Bureau data for 1997, there were 3,700 firms in this category that

¹⁵⁶ 13 C.F.R. § 121.201, NAICS code 518111 (changed from previous code 514191, “On-Line Information Services,” in Oct. 2002).

¹⁵⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 514191 (issued Oct. 2000).

¹⁵⁸ See U.S. Census Bureau, 2002 Economic Census, Industry Series: “Information,” Table 2, Comparative Statistics for the United States (1997 NAICS Basis): 2002 and 1997, NAICS code 514191 (issued Nov. 2004). The preliminary data indicate that the total number of “establishments” increased from 4,165 to 4,394. In this context, the number of establishments is a less helpful indicator of small business prevalence than is the number of “firms,” because the latter number takes into account the concept of common ownership or control. The more helpful 2002 census data on firms, including employment and receipts numbers, will be issued in late 2005.

¹⁵⁹ U.S. Census Bureau, “2002 NAICS Definitions: 518112 Web Search Portals” (Feb. 2004) <www.census.gov>.

¹⁶⁰ 13 C.F.R. § 121.201, NAICS code 518112 (changed from 514199 in Oct. 2002).

¹⁶¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 514199 (issued Oct. 2000). This category was created for the 2002 Economic Census by taking a portion of the superseded 1997 category, “All Other Information Services,” NAICS code 514199. The data cited in the text above are derived from the superseded category.

¹⁶² U.S. Census Bureau, “2002 NAICS Definitions: 518210 Data Processing, Hosting, and Related Services” (Feb. 2004) <www.census.gov>.

¹⁶³ 13 C.F.R. § 121.201, NAICS code 518210 (changed from 514210 in Oct. 2002).

operated for the entire year.¹⁶⁴ Of these, 3,477 had annual receipts of under \$10 million, and an additional 108 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

56. *All Other Information Services.* "This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives)."¹⁶⁵ Our action pertains to VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is \$6 million or less in average annual receipts.¹⁶⁶ According to Census Bureau data for 1997, there were 195 firms in this category that operated for the entire year.¹⁶⁷ Of these, 172 had annual receipts of under \$5 million, and an additional nine firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

57. *Internet Publishing and Broadcasting.* "This industry comprises establishments engaged in publishing and/or broadcasting content on the Internet exclusively. These establishments do not provide traditional (non-Internet) versions of the content that they publish or broadcast."¹⁶⁸ The SBA has developed a small business size standard for this new (2002) census category; that size standard is 500 or fewer employees.¹⁶⁹ To assess the prevalence of small entities in this category, we will use 1997 Census Bureau data for a relevant, now-superseded census category, "All Other Information Services." The SBA small business size standard for that prior category was \$6 million or less in average annual receipts. According to Census Bureau data for 1997, there were 195 firms in the prior category that operated for the entire year.¹⁷⁰ Of these, 172 had annual receipts of under \$5 million, and an additional nine firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of the firms in this current category are small entities that may be affected by our action.

58. *Software Publishers.* These companies may design, develop or publish software and may provide other support services to software purchasers, such as providing documentation or assisting in installation. The companies may also design software to meet the needs of specific users. The SBA has developed a small business size standard of \$21 million or less in average annual receipts for all of the following pertinent categories: Software Publishers, Custom Computer Programming Services, and Other

¹⁶⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514210 (issued Oct. 2000).

¹⁶⁵ U.S. Census Bureau, "2002 NAICS Definitions: 519190 All Other Information Services" (Feb. 2004) <www.census.gov>.

¹⁶⁶ 13 C.F.R. § 121.201, NAICS code 519190 (changed from 514199 in Oct. 2002).

¹⁶⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514199 (issued Oct. 2000). This category was created for the 2002 Economic Census by taking a portion of the superseded 1997 category, "All Other Information Services," NAICS code 514199. The data cited in the text above are derived from the superseded category.

¹⁶⁸ U.S. Census Bureau, "2002 NAICS Definitions: 516110 Internet Publishing and Broadcasting" (Feb. 2004) <www.census.gov>.

¹⁶⁹ 13 C.F.R. § 121.201, NAICS code 516110 (derived from 514199 and other 1997 codes).

¹⁷⁰ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514199 (issued Oct. 2000). This category was created for the 2002 Economic Census by taking portions of numerous 1997 categories.

Computer Related Services.¹⁷¹ For Software Publishers, Census Bureau data for 1997 indicate that there were 8,188 firms in the category that operated for the entire year.¹⁷² Of these, 7,633 had annual receipts under \$10 million, and an additional 289 firms had receipts of between \$10 million and \$24,999,999. For providers of Custom Computer Programming Services, the Census Bureau data indicate that there were 19,334 firms that operated for the entire year.¹⁷³ Of these, 18,786 had annual receipts of under \$10 million, and an additional 352 firms had receipts of between \$10 million and \$24,999,999. For providers of Other Computer Related Services, the Census Bureau data indicate that there were 5,524 firms that operated for the entire year.¹⁷⁴ Of these, 5,484 had annual receipts of under \$10 million, and an additional 28 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of the firms in each of these three categories are small entities that may be affected by our action.

5. Equipment Manufacturers

59. The equipment manufacturers described in this section are apparently merely indirectly affected by our current action, and therefore would not formally be a part of this RFA analysis. We have included them, however, to broaden the record in this proceeding and to alert them to our decisions.

60. *Wireless Communications Equipment Manufacturers.* The SBA has established a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. Examples of products in this category include "transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment"¹⁷⁵ and may include other devices that transmit and receive IP-enabled services, such as personal digital assistants (PDAs). Under the SBA size standard, firms are considered small if they have 750 or fewer employees.¹⁷⁶ According to Census Bureau data for 1997, there were 1,215 establishments¹⁷⁷ in this category that operated for the entire year.¹⁷⁸ Of those, there were 1,150 that had employment of under 500, and an additional 37 that had employment of

¹⁷¹ 13 C.F.R. § 121.201, NAICS codes 511210, 541511, and 541519.

¹⁷² U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 511210 (issued Oct. 2000).

¹⁷³ U.S. Census Bureau, 1997 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4a, NAICS code 541511 (issued Oct. 2000).

¹⁷⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4a, NAICS code 541519 (issued Oct. 2000).

¹⁷⁵ Office of Management and Budget, North American Industry Classification System 308-09 (1997) (NAICS code 334220).

¹⁷⁶ 13 C.F.R. § 121.201, NAICS code 334220.

¹⁷⁷ The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 1997, which were 1,089.

¹⁷⁸ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Industry Statistics by Employment Size," Table 4, NAICS code 334220 (issued Aug. 1999).

500 to 999. The percentage of wireless equipment manufacturers in this category was approximately 61.35%,¹⁷⁹ so we estimate that the number of wireless equipment manufacturers with employment of under 500 was actually closer to 706, with an additional 23 establishments having employment of between 500 and 999. Consequently, we estimate that the majority of wireless communications equipment manufacturers are small entities that may be affected by our action.

61. *Telephone Apparatus Manufacturing.* This category “comprises establishments primarily engaged primarily in manufacturing wire telephone and data communications equipment.”¹⁸⁰ Examples of pertinent products are “central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.”¹⁸¹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁸² According to Census Bureau data for 1997, there were 598 establishments in this category that operated for the entire year.¹⁸³ Of these, 574 had employment of under 1,000, and an additional 17 establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

62. *Electronic Computer Manufacturing.* This category “comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers.”¹⁸⁴ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁸⁵ According to Census Bureau data for 1997, there were 563 establishments in this category that operated for the entire year.¹⁸⁶ Of these, 544 had employment of under 1,000, and an additional 11 establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

63. *Computer Terminal Manufacturing.* “Computer terminals are input/output devices that connect with a central computer for processing.”¹⁸⁷ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁸⁸ According to Census

¹⁷⁹ *Id.* at Table 5.

¹⁸⁰ Office of Management and Budget, North American Industry Classification System 308 (1997) (NAICS code 334210).

¹⁸¹ *Id.*

¹⁸² 13 C.F.R. § 121.201, NAICS code 334210.

¹⁸³ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Telephone Apparatus Manufacturing,” Table 4, NAICS code 334210 (issued Sept. 1999).

¹⁸⁴ Office of Management and Budget, North American Industry Classification System 306 (1997) (NAICS code 334111).

¹⁸⁵ 13 C.F.R. § 121.201, NAICS code 334111.

¹⁸⁶ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electronic Computer Manufacturing,” Table 4, NAICS code 334111 (issued Aug. 1999).

¹⁸⁷ Office of Management and Budget, North American Industry Classification System 307 (1997) (NAICS code 334113).

¹⁸⁸ 13 C.F.R. § 121.201, NAICS code 334113.

Bureau data for 1997, there were 142 establishments in this category that operated for the entire year, and all of the establishments had employment of under 1,000.¹⁸⁹ Consequently, we estimate that the majority or all of these establishments are small entities that may be affected by our action.

64. *Other Computer Peripheral Equipment Manufacturing.* Examples of peripheral equipment in this category include keyboards, mouse devices, monitors, and scanners.¹⁹⁰ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁹¹ According to Census Bureau data for 1997, there were 1061 establishments in this category that operated for the entire year.¹⁹² Of these, 1,046 had employment of under 1,000, and an additional six establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

65. *Fiber Optic Cable Manufacturing.* These establishments manufacture "insulated fiber-optic cable from purchased fiber-optic strand."¹⁹³ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁹⁴ According to Census Bureau data for 1997, there were 38 establishments in this category that operated for the entire year.¹⁹⁵ Of these, 37 had employment of under 1,000, and one establishment had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

66. *Other Communication and Energy Wire Manufacturing.* These establishments manufacture "insulated wire and cable of nonferrous metals from purchased wire."¹⁹⁶ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁹⁷ According to Census Bureau data for 1997, there were 275 establishments in this category that operated for the entire year.¹⁹⁸ Of these, 271 had employment of under 1,000, and four establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority or all of these establishments are small entities that may be affected by our action.

¹⁸⁹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Computer Terminal Manufacturing," Table 4, NAICS code 334113 (issued Aug. 1999).

¹⁹⁰ Office of Management and Budget, North American Industry Classification System 307-08 (1997) (NAICS code 334119).

¹⁹¹ 13 C.F.R. § 121.201, NAICS code 334119.

¹⁹² U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Other Computer Peripheral Equipment Manufacturing," Table 4, NAICS code 334119 (issued Aug. 1999).

¹⁹³ Office of Management and Budget, North American Industry Classification System 330 (1997) (NAICS code 335921).

¹⁹⁴ 13 C.F.R. § 121.201, NAICS code 335921.

¹⁹⁵ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Fiber Optic Cable Manufacturing," Table 4, NAICS code 335921 (issued Nov. 1999).

¹⁹⁶ Office of Management and Budget, North American Industry Classification System 331 (1997) (NAICS code 335929).

¹⁹⁷ 13 C.F.R. § 121.201, NAICS code 335929.

¹⁹⁸ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Other Communication and Energy Wire Manufacturing," Table 4, NAICS code 335929 (issued Nov. 1999).

67. *Audio and Video Equipment Manufacturing.* These establishments manufacture “electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications.”¹⁹⁹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.²⁰⁰ According to Census Bureau data for 1997, there were 554 establishments in this category that operated for the entire year.²⁰¹ Of these, 542 had employment of under 500, and nine establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

68. *Electron Tube Manufacturing.* These establishments are “primarily engaged in manufacturing electron tubes and parts (except glass blanks).”²⁰² The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.²⁰³ According to Census Bureau data for 1997, there were 158 establishments in this category that operated for the entire year.²⁰⁴ Of these, 148 had employment of under 500, and three establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

69. *Bare Printed Circuit Board Manufacturing.* These establishments are “primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components.”²⁰⁵ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²⁰⁶ According to Census Bureau data for 1997, there were 1,389 establishments in this category that operated for the entire year.²⁰⁷ Of these, 1,369 had employment of under 500, and 16 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

70. *Semiconductor and Related Device Manufacturing.* These establishments manufacture “computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media.”²⁰⁸ The SBA has developed a small business size standard for this

¹⁹⁹ U.S. Census Bureau, “2002 NAICS Definitions: 334310 Audio and Video Equipment Manufacturing” (Feb. 2004) <www.census.gov>.

²⁰⁰ 13 C.F.R. § 121.201, NAICS code 334310.

²⁰¹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Audio and Video Equipment Manufacturing,” Table 4, NAICS code 334310 (issued Aug. 1999).

²⁰² U.S. Census Bureau, “2002 NAICS Definitions: 334411 Electron Tube Manufacturing” (Feb. 2004) <www.census.gov>.

²⁰³ 13 C.F.R. § 121.201, NAICS code 334411.

²⁰⁴ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electron Tube Manufacturing,” Table 4, NAICS code 334411 (issued July 1999).

²⁰⁵ U.S. Census Bureau, “2002 NAICS Definitions: 334412 Bare Printed Circuit Board Manufacturing” (Feb. 2004) <www.census.gov>.

²⁰⁶ 13 C.F.R. § 121.201, NAICS code 334412.

²⁰⁷ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Bare Printed Circuit Board Manufacturing,” Table 4, NAICS code 334412 (issued Aug. 1999).

²⁰⁸ U.S. Census Bureau, “2002 NAICS Definitions: 334413 Semiconductor and Related Device Manufacturing” (Feb. 2004) <www.census.gov>.

category of manufacturing; that size standard is 500 or fewer employees.²⁰⁹ According to Census Bureau data for 1997, there were 1,082 establishments in this category that operated for the entire year.²¹⁰ Of these, 987 had employment of under 500, and 52 establishments had employment of 500 to 999.

71. *Electronic Capacitor Manufacturing.* These establishments manufacture “electronic fixed and variable capacitors and condensers.”²¹¹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²¹² According to Census Bureau data for 1997, there were 128 establishments in this category that operated for the entire year.²¹³ Of these, 121 had employment of under 500, and four establishments had employment of 500 to 999.

72. *Electronic Resistor Manufacturing.* These establishments manufacture “electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.”²¹⁴ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²¹⁵ According to Census Bureau data for 1997, there were 118 establishments in this category that operated for the entire year.²¹⁶ Of these, 113 had employment of under 500, and 5 establishments had employment of 500 to 999.

73. *Electronic Coil, Transformer, and Other Inductor Manufacturing.* These establishments manufacture “electronic inductors, such as coils and transformers.”²¹⁷ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²¹⁸ According to Census Bureau data for 1997, there were 448 establishments in this category that operated for the entire year.²¹⁹ Of these, 446 had employment of under 500, and two establishments had employment of 500 to 999.

²⁰⁹ 13 C.F.R. § 121.201, NAICS code 334413.

²¹⁰ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Semiconductor and Related Device Manufacturing,” Table 4, NAICS code 334413 (issued July 1999).

²¹¹ U.S. Census Bureau, “2002 NAICS Definitions: 334414 Electronic Capacitor Manufacturing” (Feb. 2004) <www.census.gov>.

²¹² 13 C.F.R. § 121.201, NAICS code 334414.

²¹³ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electronic Capacitor Manufacturing,” Table 4, NAICS code 334414 (issued July 1999).

²¹⁴ U.S. Census Bureau, “2002 NAICS Definitions: 334415 Electronic Resistor Manufacturing” (Feb. 2004) <www.census.gov>.

²¹⁵ 13 C.F.R. § 121.201, NAICS code 334415.

²¹⁶ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electronic Resistor Manufacturing,” Table 4, NAICS code 334415 (issued Aug. 1999).

²¹⁷ U.S. Census Bureau, “2002 NAICS Definitions: 334416 Electronic Coil, Transformer, and Other Inductor Manufacturing” (Feb. 2004) <www.census.gov>.

²¹⁸ 13 C.F.R. § 121.201, NAICS code 334416.

²¹⁹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electronic Coil, Transformer, and Other Inductor Manufacturing,” Table 4, NAICS code 334416 (issued Aug. 1999).

74. *Electronic Connector Manufacturing.* These establishments manufacture “electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.”²²⁰ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²²¹ According to Census Bureau data for 1997, there were 347 establishments in this category that operated for the entire year.²²² Of these, 332 had employment of under 500, and 12 establishments had employment of 500 to 999.

75. *Printed Circuit Assembly (Electronic Assembly) Manufacturing.* These are establishments “primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards.”²²³ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²²⁴ According to Census Bureau data for 1997, there were 714 establishments in this category that operated for the entire year.²²⁵ Of these, 673 had employment of under 500, and 24 establishments had employment of 500 to 999.

76. *Other Electronic Component Manufacturing.* These are establishments “primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards.”²²⁶ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²²⁷ According to Census Bureau data for 1997, there were 1,835 establishments in this category that operated for the entire year.²²⁸ Of these, 1,814 had employment of under 500, and 18 establishments had employment of 500 to 999.

77. *Computer Storage Device Manufacturing.* These establishments manufacture “computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media.”²²⁹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.²³⁰ According to Census Bureau data for

²²⁰ U.S. Census Bureau, “2002 NAICS Definitions: 334417 Electronic Connector Manufacturing” (Feb. 2004) <www.census.gov>.

²²¹ 13 C.F.R. § 121.201, NAICS code 334417.

²²² U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electronic Connector Manufacturing,” Table 4, NAICS code 334417 (issued July 1999).

²²³ U.S. Census Bureau, “2002 NAICS Definitions: 334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing” (Feb. 2004) <www.census.gov>.

²²⁴ 13 C.F.R. § 121.201, NAICS code 334418.

²²⁵ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Printed Circuit Assembly (Electronic Assembly) Manufacturing,” Table 4, NAICS code 334418 (issued Sept. 1999).

²²⁶ U.S. Census Bureau, “2002 NAICS Definitions: 334419 Other Electronic Component Manufacturing” (Feb. 2004) <www.census.gov>.

²²⁷ 13 C.F.R. § 121.201, NAICS code 334419.

²²⁸ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Other Electronic Component Manufacturing,” Table 4, NAICS code 334419 (issued Aug. 1999).

²²⁹ U.S. Census Bureau, “2002 NAICS Definitions: 334112 Computer Storage Device Manufacturing” (Feb. 2004) <www.census.gov>.

²³⁰ 13 C.F.R. § 121.201, NAICS code 334112.

1997, there were 209 establishments in this category that operated for the entire year.²³¹ Of these, 197 had employment of under 500, and eight establishments had employment of 500 to 999

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

78. Should the Commission decide to adopt any regulations to ensure that consumer protection needs are met by all providers of broadband Internet access service, the associated rules potentially could modify the reporting and recordkeeping requirements of certain broadband Internet access services providers. We could, for instance, require that broadband Internet access service providers must comply with slamming, truth-in-billing-type protections, or network outage reporting requirements. These proposals may impose additional reporting or recordkeeping requirements on entities. We seek comment on the possible burden these requirements would place on small entities. Also, we seek comment on whether a special approach toward any possible compliance burdens on small entities might be appropriate. Entities, especially small businesses, are encouraged to quantify the costs and benefits of any reporting requirement that may be established in this proceeding.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

79. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.²³²

80. The Commission's primary objective is to develop a framework for consumer protection in the broadband era – a framework that ensures that consumer protection needs are met by all providers of broadband Internet access service, regardless of the underlying technology. We seek comment here on the effect the various proposals described in the *Notice*, and summarized below, will have on small entities, and on what effect alternative rules would have on those entities. We invite comment on ways in which the Commission can achieve its goal of protecting consumers while at the same time impose minimal burdens on small broadband Internet access service providers. With respect to any of our consumer protection regulations already in place, has the Commission adopted any provisions for small entities that we should similarly consider here?

81. *CPNI*. In this *Notice*, the Commission asks whether it should extend privacy requirements similar to the Act's CPNI requirements to providers of broadband Internet access services.²³³ We ask, for example, whether we should forbid broadband Internet access providers from disclosing, without their customers' approval, information about their customers that they learn through the provision of their

²³¹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Computer Storage Device Manufacturing," Table 4, NAICS code 334112 (issued July 1999).

²³² 5 U.S.C. § 603(c).

²³³ See *supra* *Notice* at para. 149.

broadband Internet access service.²³⁴ By developing the record with respect to privacy concerns, the Commission can appropriately determine whether providers of broadband Internet access services, including small entities, should be subject to similar privacy regulations.²³⁵

82. *Slamming.* We seek comment on whether we should impose slamming requirements on providers of broadband Internet access service and to explain in what circumstances subscribers to broadband Internet access could get “slammed.”²³⁶ We also ask whether the provisioning process for broadband Internet access service is such that an unauthorized change in provider is more likely in situations where the provider relies on third-party broadband transmission facilities.²³⁷ We recognize that small broadband Internet access service providers may rely more on third-party broadband transmission facilities and could potentially inform the Commission as to whether slamming is likely to occur in those situations.

83. *Truth-in-Billing.* We invite comment on whether we should impose requirements on broadband Internet access service providers that are similar to our truth-in-billing requirements or are otherwise geared toward reducing slamming, cramming, or other types of telecommunications-related fraud.²³⁸ We ask parties to explain what problems customers of broadband Internet access service are likely to have with their bills and whether we should address these problems through truth-in-billing-type requirements.²³⁹ What effect will this proposal have on small entities, and are there alternatives to imposing truth-in-billing type regulations?

84. *Network Outage Reporting.* We seek comment as to whether broadband Internet access service providers should notify the Commission of outages of thirty or more minutes that affect a substantial number of customers or involve major airports, major military installations, key government facilities, nuclear power plants, or 911 facilities.²⁴⁰ We encourage small entities to identify any alternatives that would protect consumers while at the same time minimizing any burden on small broadband Internet access providers.

85. *Section 214 Discontinuance.* In the *Notice*, the Commission stated that section 214 of the Act limits a telecommunications carrier’s ability to discontinue unilaterally its service to customers.²⁴¹ The Commission’s implementing rules generally require that domestic carriers wishing to “discontinue, reduce, or impair” services must first request authority to do so from the Commission and must notify affected customers and others of their plans. We ask whether the Commission should impose discontinuance-type requirements on providers of broadband Internet access service.²⁴²

86. *Section 254(g) Rate Averaging Requirements.* In the *Notice*, the Commission explains that section 254(g) required the Commission to adopt rules “to require that the rates charged by providers of

²³⁴ See *id.* at para. 149.

²³⁵ See *id.* at para. 149.

²³⁶ See *id.* at para. 151.

²³⁷ See *id.* at para. 151.

²³⁸ See *id.* at para. 153.

²³⁹ See *id.* at para. 153.

²⁴⁰ See *id.* at para. 154.

²⁴¹ See *id.* at para. 155.

²⁴² See *id.* at para. 156.

interexchange telecommunications services to subscribers in rural and high cost areas . . . be no higher than the rates charged by each such provider to its subscribers in urban areas.²⁴³ We ask, for example, whether we should adopt similar rate averaging requirements on providers of broadband Internet access services, particularly as consumers substitute broadband services and applications for narrowband services that were covered by section 254(g).²⁴⁴

87. In the *Notice*, we ask commenters to address whether the imposition of regulations pursuant to our ancillary jurisdiction, and the corresponding ability of consumers to take advantage of Commission avenues for resolution of consumer protection issues, is desirable and necessary as a matter of public policy, or whether we should rely on market forces to address some or all of the areas listed.²⁴⁵ The option of relying on market forces may benefit entities, especially small entities, who may find it costly or burdensome to comply with Commission regulations. We also ask whether these types of regulations are more or less relevant in the context of broadband Internet access service than they are for traditional telephony services.²⁴⁶ In addition, we ask commenters to describe any technical, economic, or other impediments that may affect the ability of broadband Internet access service providers to comply with such regulations. We also ask whether there are areas of consumer protection not listed above for which the Commission should impose regulations.²⁴⁷

88. *Federal and State Involvement.* To the extent that the Commission finds it necessary to impose consumer protection and related regulations on broadband Internet access service providers, we also seek comment on how best to harmonize federal regulations with the states' efforts and expertise in these areas.²⁴⁸

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

89. None.

²⁴³ See *id.* at para. 157.

²⁴⁴ See *id.* at para. 157.

²⁴⁵ See *id.* at para. 147.

²⁴⁶ See *id.* at para. 147.

²⁴⁷ See *id.* at para. 147.

²⁴⁸ See *id.* at para. 158.

**STATEMENT OF
CHAIRMAN KEVIN J. MARTIN**

Re: Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers (CC Docket No. 02-33), Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services (CC Docket No. 01-337), Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements (CC Docket Nos. 95-20, 98-10), Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises (WC Docket No. 04-242), Consumer Protection in the Broadband Era (WC Docket No. 05-271)

The Order that we adopt today is a momentous one. It ends the regulatory inequities that currently exist between cable and telephone companies in their provision of broadband Internet services. As I have said on numerous occasions, leveling the playing field between these providers has been one of my highest priorities. With this Order, wireline broadband Internet access providers, like cable modem service providers, will be considered information service providers and will no longer be compelled by regulation to unbundle and separately tariff the underlying transmission component of their Internet access service.

Most importantly, however, the actions we take in this Order are an explicit recognition that the telecommunications marketplace that exists today is vastly different from the one governed by regulators over 30 years ago. The *Computer Inquiry* requirements that were adopted several decades ago were based on the assumption that, without the imposition of strict regulation, telephone companies would be able to exert considerable market power over unaffiliated entities in the provision of information services. To the extent that this assumption was true at the time, it is no longer true in today's broadband market.

As the item recognizes, the broadband Internet access market today is characterized by multiple platforms that are vigorously competing for customers. Such changed market conditions require, as the Supreme Court in the *Brand X* decision phrased it, a "fresh analysis." I am pleased that the Commission so quickly undertook this analysis, and, in so doing, removed legacy regulation that applied to only one of the platform providers – the telephone companies.

Broadband deployment is vitally important to our nation as new, advanced services hold the promise of unprecedented business, educational, and healthcare opportunities for all Americans. Perpetuating the application of outdated regulations on only one set of Internet access providers inhibits infrastructure investment, innovation, and competition generally.

In taking these actions, we recognize that change is never easy. Nor can it be effectuated overnight. ISPs currently rely on the transmission offerings that the telephone companies have been compelled by regulation to make available. Such a transition is vital to the continuity of service for thousands of customers. To this end, we require the telephone companies to make their current transmission offerings available for one year from the effective date of this Order.

Similarly, we cannot permit the telephone companies to immediately cease contributing to the universal service fund on the portion of revenues derived from these tariffed Internet access offerings. We must ensure the stability of the fund. Accordingly, we require telephone companies to continue

contributing to the universal service fund on their Internet access services based on their current contribution levels for 270 days following the effective date of the Order or until we adopt new contribution rules, whichever comes first. Either way, the Commission will act diligently to ensure that there will be no adverse impact to the fund as a result of the holdings today.

Although we are confronting a changed marketplace, government will continue to have a role in this dynamic, new broadband marketplace. Together with our state colleagues, the Commission must vigilantly ensure that law enforcement and consumer protection needs continue to be met. To accomplish this, we adopt a Notice of Proposed Rulemaking seeking comment on the extent to which we need to develop a consumer protection framework that applies to all broadband Internet access platform providers, regardless of the underlying technology.

We also adopt today a vitally important companion item that confirms that facilities-based Internet access providers (as well as interconnection VoIP providers) are subject to the requirements of CALEA. Law enforcement agencies must have the ability to conduct electronic surveillance over broadband technologies.

The Commission also adopts today a Policy Statement that reflects each Commissioner's core beliefs about certain rights all consumers of broadband Internet access should have. Competition has ensured consumers have had these rights to date, and I remain confident that it will continue to do so.

I believe that, with the actions we take today, consumers will reap the benefits of increased Internet access competition and enjoy innovative, high-speed services at lower prices. There is, however, more to do to stimulate infrastructure investment, broadband deployment, and competition in the broadband market. We intend to tackle these challenges in the upcoming months.

Finally, I want to thank my colleagues for their perseverance and commitment to work together to adopt this item today. It is an honor and a privilege to serve with such dedicated and capable public servants.

STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY

Re: Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers (CC Docket No. 02-33), Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services (CC Docket No. 01-337), Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements (CC Docket Nos. 95-20, 98-10), Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises (WC Docket No. 04-242), Consumer Protection in the Broadband Era (WC Docket No. 05-271)

Three and a half years ago, my colleagues and I made a promise to the American people: we promised that efforts to deploy twenty-first century broadband technologies for public use would not be crushed by the weight of 1930s-era regulations. To that end, we initiated a series of proceedings designed to reevaluate the role of traditional common carrier regulations in the blossoming market for broadband Internet access services.

We quickly determined that cable modem services should be free from the heavy burdens of Title II regulation. That determination was soon subject to legal challenge, and the resulting litigation effectively prevented action with regard to similar services provided over wireline facilities. In June's *NCTA v. Brand X* decision, the Supreme Court brought that period of uncertainty to a close, validating the Commission's authority to classify a broadband Internet access service as a Title I information service.

Today, with the benefit of the Court's guidance, we extend similar relief to providers of wireline broadband Internet access. Specifically, we clarify that wireline broadband Internet access services – like the cable modem services at issue in *Brand X* – are “information services,” and thus not automatically subject to the full range of Title II requirements designed for a narrowband, analog, one-wire world. We also lift the so-called “*Computer Inquiry*” requirements, which were crafted to prevent companies that exercised substantial market power in the provision of telecommunications from leveraging that dominance into the provision of enhanced services. Requirements such as these were never meant to apply in a competitive, multi-platform communications market such as the market for high-speed Internet access services.

And let there be no doubt: competition among broadband providers is flourishing. The Commission's most recent statistics show that over 80 percent of zip codes in America are served by two or more high-speed providers, about two-thirds are served by three or more, and over half are served by four or more. Moreover, I fully expect that providers taking advantage of new platforms will soon offer consumers even more choices in even more areas. Over 1.2 million high-speed lines in service today use wireless, satellite, fiber-optic, and powerline technologies; that number is poised to rise dramatically in the very near future. The result of such competition will be better and better services at lower and lower prices, with offerings designed to match customers' needs rather than regulators' preferences.

Today's decision is *not*, however, the end of the story. Wireline broadband providers are not subject to Title II or to the *Computer Inquiry* requirements, but that does not mean that they are immune from *all* regulatory requirements. When the Commission first issued its tentative conclusion that these services were outside the scope of Title II, I emphasized my commitment to preserving any specific

regulatory requirements that are necessary for the furtherance of critical policy objectives. In June, the *Brand X* majority made clear that the Commission retains the prerogative to exercise its Title I "ancillary jurisdiction" to do just that. The Commission has already made clear its intention to ensure access to emergency services as Americans transition to packet-switched communications technologies, irrespective of how those services are classified under the Communications Act. As we make clear in today's *Notice*, we will now turn our attention to other "social policy" requirements, such as those involving disability access, slamming, and consumer privacy. Where action is warranted, we will act.

There is still work to be done as we endeavor to establish a new, minimally regulated framework for the digital era. But however we address the issues that remain before us, I expect that our decision today will spur future investment in broadband infrastructure and provide the flexibility to which companies in a competitive market and their customers are entitled.

In short, I am confident that today's Order does much to fulfill our promise to the American people, and I am happy to support this item.

STATEMENT OF
COMMISSIONER MICHAEL J. COPPS,
CONCURRING

Re: *In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings; Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided via Fiber to the Premises; Consumer Protection in the Broadband Era, Report and Order and Notice of Proposed Rulemaking (CC Docket Nos. 02-33, 01-337, 95-20, 98-10, WC Docket No. 04-242)*

My goal as a Commissioner has always been to advance the public interest as far as I can with the tools at my disposal at the time. I objected strenuously to our original reclassification of cable modem and our tentative reclassification of wireline broadband. But the Supreme Court has fundamentally changed the legal landscape. I personally find the jurisprudence of Justice Scalia far more persuasive than that of the Court majority, and I agree wholeheartedly with Justice Scalia's observation that the previous Commission chose to achieve its objectives "through an implausible reading of the statute, and has thus exceeded the authority given it by Congress."

But neither Justice Scalia's opinion nor my personal reading will guide the Commission's approach going forward. The handwriting is on the wall. DSL *will* be reclassified, either now or soon from now, whether I agree or not. This is not a situation of my making or my preference, and I believe that it does not inure to the benefit of this institution or to consumers across the land. But when fundamental responsibilities like homeland security, universal service, disabilities access, enterprise competition, and Internet discrimination protections are on the chopping block, I feel compelled to work hard and be creative to advance the public interest rather than throwing up my hands. I therefore will concur in this proceeding to protect our ability to meet these core responsibilities.

As we enter the world of Title I today, we all know what the FCC's goals must be. Among other things, we must continue to protect homeland security. We must meet our universal service responsibilities. We must maintain disabilities access. We must protect fledgling competition. And we must state clearly that innovators, technology companies, and consumers will not face unfair discrimination on the Internet by network providers.

Our ability to advance these critical goals should progress as we advance to broadband. They should not shrink as we fiddle with legalisms and parse definitions. This item is not an exercise in hair-splitting about telecommunications services and information services. It is about how we promote the deployment of advanced communications while still staying true to our core values. Nonetheless, in recent years this Commission has irresponsibly reclassified services without addressing the larger implications of its decisions.

Today we begin to face up to this shortfall. The Order is far from ideal. But our actions today

are infinitely better than they otherwise might have been because of the intensive discussions we have had among the Commissioners. We have avoided the unacceptable scenario of reclassifying DSL and then punting all of the critical responsibilities listed above to some uncertain future deliberation. I could not have been party to that approach. But in the end, we moved away from that and made progress on numerous important statutory obligations:

- *Homeland Security:* We ensure that law enforcement officials will have the tools that they need to protect our country through the Communications Assistance for Law Enforcement Act and the National Security Emergency Preparedness Telecommunications Service Priority System.
- *Universal Service:* In addition, we ensure the stability of the universal service contribution base until the Commission agrees on a path forward. Universal service is critical to the Nation and critical to Congress. It is one of the pillars upon which the Communications Act is built, and I would never be party to this agency abandoning this program and the millions of Americans who depend on it. Absent the *Brand X* decision, we would have more with which to work, but in order to shield the program in this specific item we put in place a nine-month stay on any changes to DSL universal service responsibilities, unless the full Commission agrees on a new system before that time. If we do not do so within nine months the Order states that: “the Commission will take whatever action is necessary to preserve existing funding levels, including extending the [nine-month] period discussed above or expanding the contribution base” (emphasis added). That is a firm and strong commitment from the Chairman and Commissioners that at the end of this period the program will be protected. We do not often commit to “take whatever action is necessary” and the promise that we will even expand the base if needed is a major achievement. I will continue to fight to keep rural America connected.
- *Disabilities:* But we had to protect more than homeland security and universal service. We had to craft protections for Americans with disabilities. I know this much: The disabilities communities did not fight for so many years to obtain “functional equivalency” and equal access to technology only to have their hard-won victories stolen by some regulatory sleight of hand. So I fought to ensure that the item guarantees accessible technologies for the 54 million Americans with disabilities.
- *Competition:* We also take significant action to protect competition. We ensure access to facilities and interconnection so that small and medium businesses can continue to enjoy the lower prices and increased choices that competition brings.
- *Internet Openness:* And critically, for the first time ever, the Commission has adopted a policy statement with principles that will guide our effort to preserve and promote the openness that makes the Internet so great.

I am especially pleased at my colleagues’ adoption of this Statement of Policy on Internet openness. This is something I have been advocating for nearly two years. This Statement lays out a path forward under which the Commission will protect network neutrality so that the Internet remains a vibrant, open place where new technologies, business innovation and competition can flourish. We need a watchful eye to ensure that network providers do not become Internet gatekeepers, with the ability to dictate who can use the Internet and for what purpose. Consumers do not want to be told that they cannot use their DSL line for VoIP, for streaming video, to access a particular news website, or to play on a particular company’s game machine. While I would have preferred a rule that we could use to bring enforcement action, this is a critical step. And with violations of our policy, I will take the next step and push for Commission action. A line has been drawn in the sand. I am particularly appreciative of the

Chairman's support of this item.

I also want to note that the Supreme Court's *Brand X* decision makes it clear that the Commission's ancillary authority can accommodate our work on homeland security, universal service, disabilities access, competition, and Internet discrimination protections—and more. But we have a ways to go. Today, in addition to our Order, we release a Notice of Proposed Rulemaking on consumer protection in the broadband era. I would have much preferred positive action on this now, but we at least put these issues squarely on the table and now we have a proceeding to deal with them. I believe that a combination of a strong record, good wide stakeholder input and Commission sensitivity to the priority Congress places on consumer issues can preserve such protections as privacy, truth-in-billing, and other safeguards for the communications tools our citizens rely upon no matter how they may be classified. Hard-won consumer protections must never be allowed to erode simply because we change the classification of the tools people rely upon to communicate with one another. So I think we come out here with a framework for consumer protection in a digital world—a framework accommodating and encouraging the expertise and authority that reside in our state public service commission counterparts. I look forward to the record that develops and to working with my colleagues and all stakeholders so that we can move ahead without further delay.

Let me sum up by reminding the Commission that we are saying today that we take the dramatic step of reclassifying DSL in order to spur broadband deployment and to help consumers. I want us to test that proposition a year from now. If by next year consumers have more broadband options, lower prices, higher speeds and better services, maybe this proposition holds true. If our broadband take-rate reverses course and the United States begins to climb up the ladder of broadband penetration rather than falling further behind so many other nations, then we'll have something to crow about. If we get no complaints about higher bills, loss of privacy and diminished access for the disability communities, we can take a bow. And critically, if we make progress on public safety and homeland security, we can be proud of our actions. So I hope next year the Commission will put its money where its mouth is and check to see if its theory yields real world results for American consumers. And if it doesn't achieve these results, I hope we'll admit it. I plan to keep tabs.

In closing, I want to thank Chairman Martin for not only permitting, but encouraging, open and genuine Commission dialogue on these difficult issues. I want to thank him, and Commissioners Adelstein and Abernathy, for their contributions to making this a better item. The Bureau toiled mightily with this proceeding and we are indebted to their diligence, hard work and creative thought all along the way. Our personal staffs performed with distinction. And I would be both ungrateful and remiss if I did not recognize the extraordinary—indeed, often heroic—exertions of my Legal Advisor Jessica Rosenworcel for helping *all* of us navigate these perilous waters and arrive at somewhat more tranquil shores.

**STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN
CONCURRING IN FCC 05-150, APPROVING IN FCC 05-153**

Re: Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers (CC Docket No. 02-33), Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services (CC Docket No. 01-337), Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements (CC Docket Nos. 95-20, 98-10), Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises (WC Docket No. 04-242), Consumer Protection in the Broadband Era (WC Docket No. 05-271) (Concurring)

Re: Communications Assistance for Law Enforcement Act and Broadband Access and Services First Report and Order and Further Notice of Proposed Rulemaking (ET Docket No. 04-295, RM-10865) (Approving)

The items before us are a real tribute to the consensus building dedication of Chairman Kevin Martin and all of my colleagues. It took extraordinary efforts by all of us because the stakes are so high, the consequences so far reaching, and the concerns so acute. And we did all of this work in an incredibly compressed time-frame.

Today, we implement the Supreme Court's guidance in the *Brand X* decision and embark on a new but uncharted path in its treatment of wireline broadband Internet access services, the high-speed DSL and fiber-to-the-home connections. These technologies are revolutionizing the way that consumers connect, learn, work, and socialize through the Internet. With the Broadband Reclassification Order and NPRM, we move toward a measured and technology-neutral approach to broadband regulation. Critical aspects of the reclassification approach, however, give me considerable pause.

Indeed, were the pen solely in my hand, these are not the precise items I would have drafted or the procedural framework I would have chosen. In the wake of the Supreme Court decision, however, this reclassification was inevitable. Moreover, the Broadband Reclassification Order reflects meaningful compromise by each of my colleagues, and I appreciate the efforts to address many of my concerns about issues including the stability of the universal service fund, access for persons with disabilities, and the ability of competitive carriers to access essential input facilities. What we've done here is ensure it was done in a fashion that protects, or holds the promise of addressing, many critical policy goals that Congress and the Commission have long held as fundamental to a "rapid, efficient, Nation-wide, and world-wide wire and radio communication service."

As we move to this less-regulated framework, I'm pleased that we take up the Supreme Court's invitation to use our Title I ancillary jurisdiction to address critical policy issues. Commissioner Copps and I have worked hard to address or lay the groundwork for addressing many important consumer and public policy concerns, and I appreciate Chairman Martin and Commissioner Abernathy's willingness to engage in a constructive discussion about a technology-neutral framework for policy in the broadband age. I'm particularly pleased that recent changes to the Broadband Reclassification Order reiterate our commitment to access for persons with disabilities and consumer protection, and provide for meaningful provisions to address the needs of carriers serving Rural America. I'm also pleased that we adopt a

companion Order applying the Communications Assistance for Law Enforcement Act (CALEA) to facilities-based broadband Internet access providers and providers of interconnected VoIP services. Finally, we adopt concurrently a companion Policy Statement that articulates a core set of principles for consumers' access to broadband and the Internet. Collectively, these provisions are essential for my support of this item.

We undertake these proceedings against the backdrop of the *Brand X* decision, in which the Supreme Court upheld the FCC's earlier determination that cable modem broadband services may be classified as information services, rather than as traditional telecommunications services. By doing so, the FCC defined these cable broadband services out of Title II of the Act, which applies to common carrier offerings. I was not at the Commission when this reclassification approach was first proposed, but the approach has always given me some grounds for real concern. By reclassifying broadband services outside of the existing Title II framework, the Commission steps away from some of the core legal protections and grounding afforded by Congress. This approach also gave a significant and articulate minority of the Supreme Court grounds for questioning whether the Commission had fundamentally misinterpreted the Communications Act. But, my reservations notwithstanding, the Supreme Court majority upheld the reclassification and we must respond to this changed landscape.

In fact, there is much to be said for a measured regulatory approach for broadband services. The applications that can ride over broadband services are bringing increased educational, economic, health, and social opportunities for consumers. I'm increasingly convinced that our global economic success will also be shaped by our commitment to ubiquitous advanced communications networks. Our challenge is to create an environment in which providers can invest in their networks and compete, application and content providers can innovate and reach consumers, and we can all maintain the core policy goals that we've worked hard to achieve.

The Broadband Reclassification Order acknowledges that the marketplace and technology of today's broadband Internet access services are markedly different from those that existed three decades ago, when most of the *Computer Inquiries*' requirements were first adopted. Although we adopt this new regulatory approach with the blessing of the Supreme Court, many of the implications for consumers are largely yet undefined. To some degree, we ask consumers to take a leap of faith based on our predictive judgment about the development of competition in an emerging and very fluid broadband marketplace.

It remains unclear whether the approach we have taken thus far has been a success. Not all consumers have a choice between affordable broadband providers, and Americans continue to pay relatively high prices for relatively limited bandwidth. As we move forward, I am pleased that the Commission adopts a one-year transition for independent ISPs and encourages parties to engage in prompt negotiations to facilitate the transition process. While this is helpful, we have a lot more work to do to establish a coherent national broadband policy that signifies the level of commitment we need as a nation to speed the deployment of affordable broadband services to all Americans. So we will have to monitor closely the development of the broadband market and the effectiveness of this approach. If results don't improve, I hope we will reconsider what measures are needed to spur the level of competition necessary to lower prices and improve services for consumers.

A critical aspect of our decision to eliminate existing access requirement for ISPs is the Commission's adoption of a companion Policy Statement that articulates a core set of principles for consumers' access to broadband and the Internet. These principles are designed to ensure that consumers will always enjoy the full benefits of the Internet. I am also pleased that these principles, which will inform the Commission's future broadband and Internet-related policymaking, will apply across the range

of broadband technologies. I commend in particular my colleague, Commissioner Copps, for his attention to this issue.

I am also pleased that changes were made to the Broadband Reclassification Order that affirm our authority under Title I to ensure access for those with disabilities. Through sections 225 and 255 of the Act, Congress codified important principles that have ensured access to functionally-equivalent services for persons with disabilities. Millions of Americans with disabilities can benefit from widely-available and accessible broadband services. Indeed, at last month's open meeting, the Commission recognized the importance of broadband services to persons with disabilities, and celebrated the 15th anniversary of the Americans with Disabilities Act (ADA), by adopting a series of orders that improved the quality of and access to important communications services for the deaf and hard of hearing community. I strongly believe that we must not relegate the ADA's important protections to the world of narrowband telephone service, and I appreciate my colleagues' willingness to address this concern.

I'm also particularly pleased that the Broadband Reclassification Order includes meaningful provisions to address the needs of carriers serving Rural America. By allowing rural providers to continue to offer their broadband services on a common carrier basis, and by allowing them to participate in the NECA pooling process, we maintain their ability to reduce administrative costs, minimize risk, and create incentives for investment in broadband facilities that are so crucial to the future of Rural America.

We also take important interim action in the Broadband Reclassification Order to preserve the stability of our universal service funding. Reclassifying broadband services as information services removes revenues from wireline broadband Internet access services from the mandatory contribution requirements of section 254, taking out a rapidly-growing segment of the telecommunications sector from the required contribution base. I would have preferred to exercise our permissive contribution authority now to address this potential decline in the contribution base permanently, but I am glad that we were able to agree to adopt an interim measure to preserve existing levels of universal service funding on a transitional basis. I also appreciate the Commission's commitment to take whatever action is necessary to preserve existing funding levels, including extending the transition or expanding the contribution base. These modifications to the Broadband Reclassification Order are critical to my support of the item.

The Commission will also need to assess how the reclassification of wireline broadband services might affect our ability to support broadband services through the universal service fund, should we decide to do so in the future. Given the growing importance of broadband services for our economy, public safety, and society, I hope that we can preserve our ability to support the deployment of these services for consumers that the market may leave behind.

I'm also glad that we've added an important Notice of Proposed Rulemaking that seeks comment on how we can ensure that we continue to meet our consumer protection obligations in the Act. On some issues, like consumer privacy, it would have been far wiser to act now. I'm troubled by the prospect that we might even temporarily roll back consumer privacy obligations in the Broadband Reclassification Order, particularly during this age in which consumers' personal data is under greater attack than ever. The Commission must move immediately to address these privacy obligations. We should also act quickly to assess the effect on our Truth-in-Billing rules and the rate averaging requirements of the Act, which ensure that charges for consumers in rural areas are not higher than those for consumers in urban areas. This Notice sets the foundation for our consumer protection efforts across all broadband technology platforms and I look forward to working with my colleagues as we move forward promptly to address these issues.

For all these reasons, I concur in today's Broadband Reclassification item and support the CALEA item.

I would like to thank my colleagues for their willingness to engage in constructive dialogue and to take meaningful steps to acknowledge many of my concerns. I also want to thank Tom Navin and the dedicated and professional staff of our Wireline Competition Bureau, who have worked many long hours to produce these companion items so quickly. All of our personal staffs have worked incredibly long hours with great dedication to speed this process along. I would like to acknowledge my personal gratitude to Scott Bergmann for his incredible stamina and persistence. I would be remiss if I didn't also thank his entire family for sacrificing their sacred time with him over these past few weeks. I look forward to working with you all as we moved forward together.